of PEM as distinct diagnosis is hardly accomplished in most hospitals. The department of medicine of our hospital is documenting the risk for PEM by the Nutrition Risk Score 2002 (NRS) since the year 2011 in the electronic health record. With the present study we aimed at reporting NRS and displaying PEM systematically as distinct diagnosis.

Methods: NRS was repositioned and integrated in the medical history of our electronic health record (Phoenix 6.32.3.4) by July 2012. The doctor has to tick the nutritional and health status score of the NRS and the system then calculates the total score (+ 1 point for age $\geqslant$70 years). The score is automatically converted into the corresponding ICD-10 codes for PEM, i.e. E43 (NRS $\geqslant$5) or E44.0 (NRS = 4) or E44.1 (NRS = 3) and directly transferred as separate diagnosis to the list of diagnoses. The nutritional assessment by the dietitian and appropriate nutritional therapy are mandatory. Not completed NRS are weekly reported to the responsible doctor.

Results: The table summarises the number of cases coded with PEM.

	2011[1] (Jan–Dec)	2012 (Jan–Dec)	2012[1] (Jan–June)	2012[2] (July–Dec)
E43	107	73	24	49
E44.0	61	117	47	70
E44.1	34	146	95	51
E46	180	27	16	11
Total	382	363	182	181

[1] Before systematic recording; [2] after systematic recording.
E43, E44.0 and E44.1: Specific codes for PEM; E46: Indeterminate code for PEM.

Conclusion: The systematic recording did not increase the number of cases coded with PEM. However, the number of specific diagnosis of PEM increased substantially, whereas the indeterminate code declined. Our system caused a correct, complete and efficient recording and coding of PEM as distinct diagnosis. The weekly control of completeness of NRS recording was thereby of particular importance.

Disclosure of Interest: None Declared

PP171-SUN
IDENTIFICATION OF THE RISK OF NOSOCOMIAL INFECTIONS WITH THE NUTRITIONAL RISK SCORE (NRS)-2002 IN HOSPITALIZED PATIENTS

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Rationale: Nosocomial Infections (NI) are related to the nutritional status. Little is known about the relation between nutritional risk and NI in hospitalized patients. A 3-month prospective survey was performed to assess NI prevalence according to nutritional risk of all patients receiving 3 meals/day without artificial nutrition support.

Methods: Dieticians assessed nutritional risk using NRS-2002 and short form-Mini Nutritional Assessment (sf-MNA). Nutritional risk was assessed by two methods: NRS-2002 for all patients and a combined score: NRS-2002 if age <65 y or sf-MNA if $\geqslant$65 y. Patients were at risk if NRS-2002 $\geqslant$3 or sf-MNA $\leqslant$11. Infections data were blindly retrieved by a specialist and NI were identified by the presence of antibiotics or fever $\geqslant$38°C, and validated using Center for Disease Control criteria.

Results: 1154 patients were included: 42% men, mean age and BMI, 69.7$\pm$19.3 y and 24.9$\pm$5.6. Proportion of infected patients in those who were performed NRS-2002 was 7%.

Table: Infected patients according to nutritional risk and departments (n (%))

	All hospital (N = 1154)	Acute care (N = 397)	Rehabilitation (N = 64)	Long term facilities (N = 164)	Psychiatry (N = 187)
NRS-2002 (n = 1091)					
At risk (n = 328, 30%)	26 (8)	12 (12)	2 (6)	3 (6)	1 (2)
Not at risk (n = 763, 70%)	47 (6)	23 (8)	1 (4)	2 (2)	2 (2)
Combined (n = 759)					
At risk (n = 435, 57%)	26 (6)	8 (6)	0	1 (2)	1 (3)
Not at risk (n = 324, 43%)	17 (5)	12 (7)	1 (14)	1 (6)	2 (2)

Conclusion: NRS-2002 alone is more discriminative than combined with sf-MNA to identify patients at increased risk of NI, especially in acute care. This can be due to the scores criteria: food intake, nutritional indicators and disease severity in NRS-2002, as compared with functional aspects in sf-MNA. NRS-2002 may be useful for detecting the patients at risk of undernutrition-related infections.

Disclosure of Interest: None Declared

PP172-SUN
MALNUTRITION-ASSOTIATED CLINICAL COURSE AND 1-YEAR MORTALITY IN CARDIAC SURGERY

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Rationale: The aim of this study was to assess association of nutritional screening and clinical course and 1-year mortality for patients operated on under cardiopulmonary bypass (CPB).

Methods: This prospective cohort study analyzed 894 adult patients who underwent CPB. Nutritional screening was performed with Malnutrition Universal Screening Tool (MUST). In-hospital mortality, 1-year mortality, postoperative complications, length of stay in intensive care unit (ICU), and length of hospitalization were analyzed.

Results: Malnutrition was associated with postoperative complications (OR 1.98, 1.39–2.81 CI; p = 0.0001), ICU stay >2 days (OR 1.56, 1.08–2.24 CI; p = 0.016), hospitalization >20 days (OR 1.59, CI 1.1–2.28; p = 0.01). Associations between malnutrition and in-hospital and 1-year mortality were not found. However, it should be noted, that only 70% of cohort were followed up until 1 year.

Conclusion: Malnutrition identified by MUST is associated with adverse clinical course. Prognostic value of nutritional screening on mortality in cardiac surgical population does not confirmed and need to be studied in future trials.

Disclosure of Interest: None Declared

PP173-SUN
NUTRITIONAL STATUS AND APPETITE IN ELDERLY PATIENTS BEFORE TRANSCATHETER AORTIC VALVE IMPLANTATION

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Rationale: The overweight/obesity is associated with adverse consequences in patients with cardiovascular disease. From

the other hand the signs of malnutrition may be recognized in elderly patients. Proper nutritional assessment may prevent malnutrition or improved nutritional status in patients after transcatheter aortic valve implantation.
The aim of the study was assessment of nutritional status and appetite in elderly (>65 yr old) patient qualified for transcatheter aortic valve implantation.
Methods: 37 patients (27M, 10 F; >65 yr old) qualified for transcatheter aortic valve implantation were included to the study.
The assessment of nutritional status was determined by the serum concentration of albumin, body mass index (BMI), 7-points Subjective Global Assessment Score (7-SGA), Mini Nutritional Assessment (MNA). Body composition (%F, LBM, ECW/ICW) was estimated using BIA method (Maltron BioScan 920–2). Appetite was determined by SNAQ.
Results: In study group mean BMI was 29.2±3.7. 27.0% of patients presented overweight and 56.0% – obesity. According 7-SGA signs of malnutrition was observed in 24% of studied patients and according MNA 44% were in the risk of malnutrition. The mean level of SNAQ score was decreased (16.38±2.0). The positive correlation was observed between age and risk of malnutrition independently of BMI. The ECW/ICW ratio was decreased in 67.5% of studied population.
Conclusion: In elderly patients qualified to transcatheter aortic valve implantation high percentage of overweight/obesity was observed. In spite of high BMI clinical and biochemical signs of malnutrition were noticed in studied population. Assessment of nutritional status in this group of patients should be performed regularly to improve survival.

Disclosure of Interest: None Declared

Nutritional epidemiology

PP174-SUN *Outstanding abstract*

ETHANOL CONSUMPTION AND CONSEQUENCES IN HPN PATIENTS

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Rationale: There are few data on ethanol (ET) consumption during HPN. In small study from US over 50% of participants declared regular alcohol consumption while on HPN [1], linked to liver disease. The aim of the study was to access the occurrence of alcoholism (AL) in HPN patients and related morbidity and mortality.
Methods: Database containing 655 patients discharged on HPN was studied. MedCalc was used for analysis.
Results: 75 patients were recognised as ethanol consumers. Most denied ET consumption and admitted only with material evidence. 37 patients admitted to drink alcohol every day in amount ranged from 1 to 20 units. These patients presented higher LFT's ($p < 0.001$, table), TG and cholesterol serum levels.
Ethanol consumers were more often rehospitalized (RR 2.6), esp. for catheter related infection (RR 6.8), mechanical catheter complications (RR 21.2) and water-electrolyte disorders (RR 9.3), more often developed catheter related bacteraemia (1.4 vs 0.48/1000 HPN days and more often suffered from acute pancreatitis (RR 11.6), liver (RR 7.86) and renal failure (RR 7.33). There were more late deaths due to catheter infection (RR 7.7), (p for all data <0.001) and myocardial infarction (RR 4.4) and liver failure(RR 7.8) $p < 0.05$). Common behaviour was delay in reporting fever and chills. 8 patients died due to acute alcohol intoxication. Attempt to start AL therapy was successful in only 1 patients.

Drinking	AspAT i.u.	AlAT i.u.	GGTP i.u.	AP i.u.
Regular	50+39	71+55	225+178	219+150
Occasional	40+44	53+64	61+89	145+118
Reference range	14–36	9–52	12–43	38–126

Conclusion: AL is a serious and concealed problem in HPN population, although less common than previously suggested.

References

[1] Ukleja A et al., ESPEN Clinical Nutrition Supplements 2010 Vol. 5, Issue 2, Page 206.

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PP175-SUN

SYSTEMATIC SCREENING FOR UNDERNUTRITION; PREDICTIVE FACTORS FOR SUCCESS

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Rationale: As of 2007, systematic screening for undernutrition has become a Performance Indicator (PI) of hospitals within the national benchmarks on quality of care of the Dutch Health Care Inspectorate (HCI). Its introduction was guided by a national implementation program. The aim of this study was to monitor the screening results from 2007 to 2010 and to identify predictive factors for achieved screening results.
Methods: All 97 Dutch hospitals were obliged to report to the HCI. An additional questionnaire was developed to determine hospital characteristics, including hospital type, size, participation in implementation project, screening tool used, screening incorporated in electronic nursing record, electronic dietetic record, presence of hospital-wide or ward task forces, and protocol-defined referral). Multivariate linear regression analysis was used to identify predictive factors for the obtained screening results, using the screening percentages of 2010 as dependent variable.
Results: The mean screening percentage increased from 51±28% in 2007 (n = 75 hospitals, n = 340000 patients) to 72±17% in 2010 (n = 97; n = 1050000) ($p < 0.01$). Eighty-four hospitals (87%) returned the questionnaire, 3 specialized hospitals were excluded from multivariate analyses. A higher screening percentage was associated with more hospitals admissions in 2010 (highest vs lowest tertile: B = 14.0, 95% CI